405 KAR 1:180. Groundwater.

RELATES TO: KRS 350.420

STATUTORY AUTHORITY: KRS 350.028, 350.420

NECESSITY, FUNCTION, AND CONFORMITY: KRS 350.028 requires the Environmental and Public Protection Cabinet to adopt rules and administrative regulations for the strip mining of coal. This administrative regulation sets forth requirements for protection of the groundwater system and groundwater monitoring.

Section 1. Recharge Capacity of Reclaimed Lands. The disturbed area shall be reclaimed to restore approximate premining recharge capacity through restoration of the capability of the reclaimed areas as a whole to transmit water to the groundwater system. The recharge capacity should be restored to support the approved postmining land use and to minimize disturbances to the prevailing hydrologic balance at the mined area and in associated off-site areas. The permittee shall be responsible for monitoring according to Section 3 of this administrative regulation to ensure that operations conform to this requirement.

Section 2. Groundwater Systems. Backfilled materials shall be placed to minimize adverse effects on groundwater flow and quality, to minimize off-site effects, and to support the approved postmining land use. The permittee shall be responsible for performing monitoring according to Section 3 of this administrative regulation to ensure that operations conform to this requirement.

Section 3. Monitoring. Groundwater levels, infiltration rates, subsurface flow and storage characteristics, and the quality of groundwater shall be monitored in a manner approved by the cabinet to determine the effects of strip mining and reclamation operations on the recharge capacity of reclaimed lands and on the quantity and quality of water in groundwater systems at the mine area and in associated off-site areas. When operations are conducted in such a manner that may affect the groundwater system, groundwater levels and groundwater quality shall be periodically monitored using wells that can adequately reflect changes in groundwater quantity and quality resulting from such operations. Sufficient water wells must be used by the permittee. The cabinet may require drilling and development of additional wells if needed to adequately monitor the groundwater system. As specified and approved by the cabinet, additional hydrologic tests, such as infiltration tests and aquifer tests, must be undertaken by the permittee to demonstrate compliance with Sections 1 and 2 of this administrative regulation. (4 Ky.R. 395; eff. 5-3-78; Am. 494; 5 Ky.R. 206; eff. 8-23-78; TAm eff. 8-9-2007.)